

Public Health Preparedness and Situational Awareness Report: #2019:51

Reporting for the week ending 12/21/19 (MMWR Week #51)

December 27th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

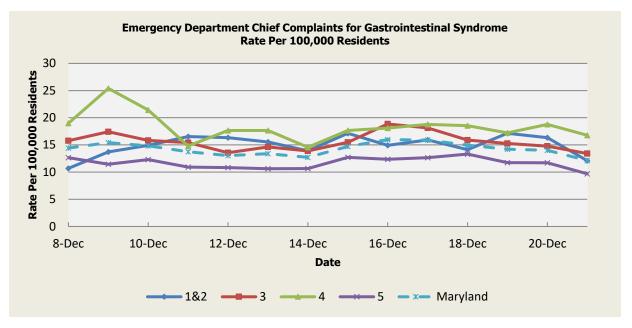
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

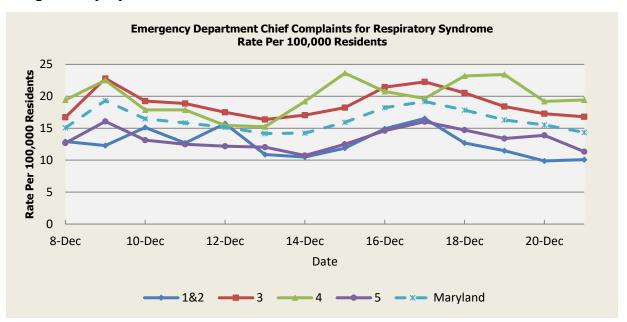


There were three (2) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis in a Nursing Home (Regions 1&2) and one (1) outbreak of Gastroenteritis in an Assisted Living Facility (Region 4).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.34	15.08	15.97	10.27	13.16		
Median Rate*	13.31	14.87	15.46	10.17	13.03		

^{*} Per 100,000 Residents

Respiratory Syndrome

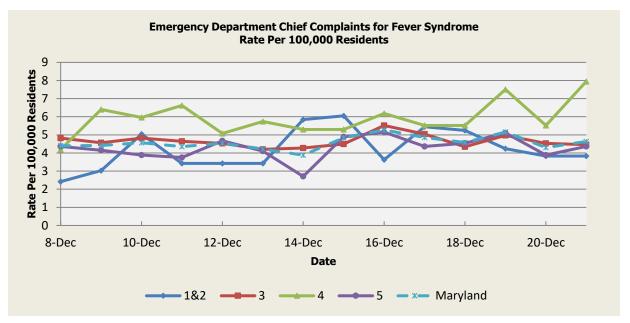


There were three (7) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of INFLUENZA associated with a Daycare Center (Region 5), one (1) outbreak of ILI in a Nursing Home (Regions 1&2), three (3) outbreaks of ILI associated with Schools (Regions 1&2, 3), and two (2) outbreaks of ILI associated with Daycare Centers (Region 3, 4).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	12.63	14.75	15.10	9.98	12.77	
Median Rate*	12.10	14.21	14.35	9.65	12.32	

* Per 100,000 Residents

Fever Syndrome

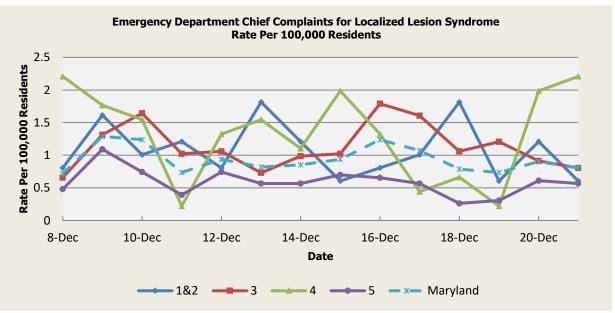


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.09	3.90	4.13	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

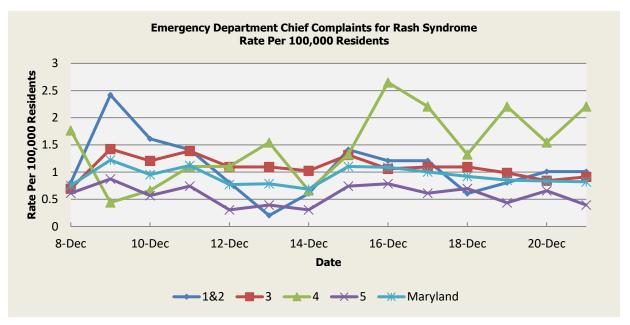


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.17	1.78	2.04	0.91	1.41	
Median Rate*	1.01	1.72	1.99	0.87	1.36	

^{*} Per 100,000 Residents

Rash Syndrome

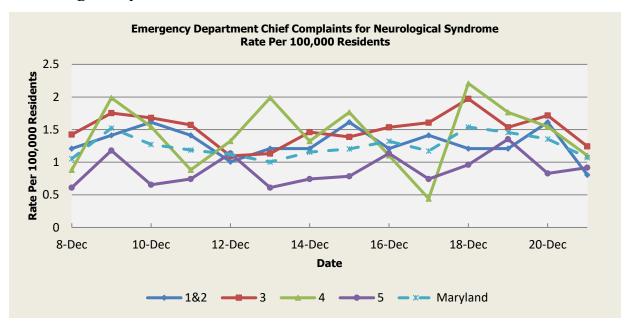


There was one Rash Syndrome outbreak reported this week: one (1) outbreak of HAND, FOOT, AND MOUTH DISEASE associated with a Daycare Center (Region 5).

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.25	1.67	1.76	0.97	1.37	
Median Rate*	1.21	1.61	1.77	0.92	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

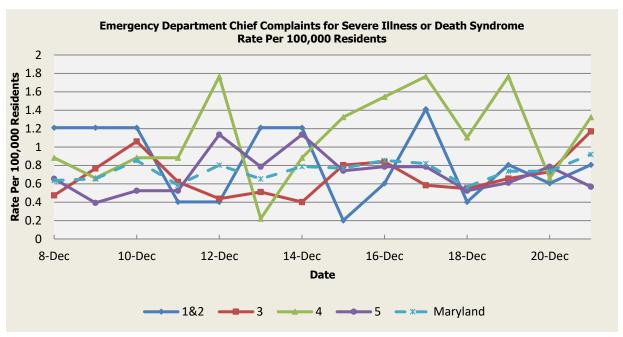


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.79	0.97	0.88	0.62	0.81	
Median Rate*	0.81	0.88	0.88	0.57	0.74	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



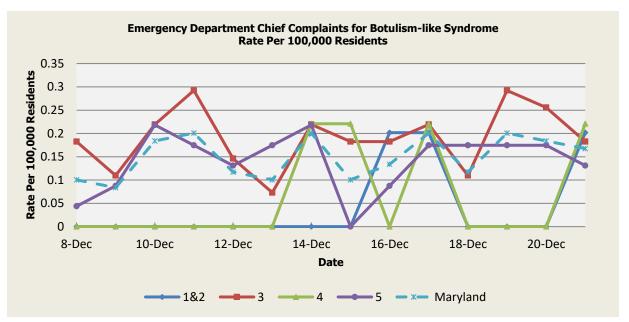
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.66	0.89	0.84	0.52	0.73		
Median Rate*	0.60	0.84	0.66	0.48	0.70		

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

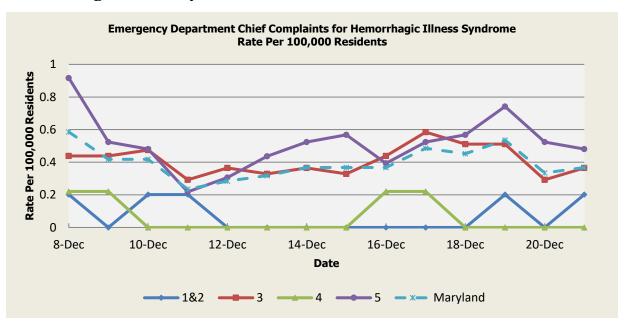


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 12/10 (Region 5), 12/11 (Regions 3,5), 12/13 (Region 5), 12/14 (Regions 4,5), 12/15 (Region 4), 12/16 (Regions 1&2), 12/17 (Regions 1&2,4,5), 12/18 (Region 5), 12/19 (Regions 3,5), 12/20 (Region 5), and 12/21 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.08	0.13	0.06	0.08	0.10	
Median Rate*	0.00	0.11	0.00	0.04	0.08	

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

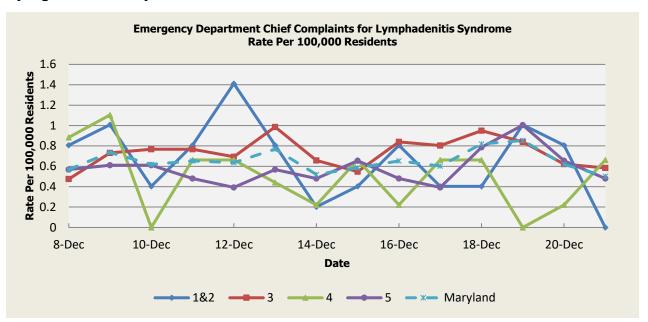


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 12/8 (Regions 1&2,3,4,5), 12/9 (Regions 3,4,5), 12/10 (Regions 1&2,3,5), 12/11 (Regions 1&2), 12/12 (Regions 3,5), 12/13 (Regions 3,5), 12/14 (Regions 3,5), 12/15 (Regions 3,5), 12/16 (Regions 3,4,5), 12/17 (Regions 3,4,5), 12/18 (Regions 3,5), 12/19 (Regions 1&2,3,5), 12/20 (Region 5), and 12/21 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.04	0.16	0.04	0.14	0.13			
Median Rate*	0.00	0.11	0.00	0.09	0.08			

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 12/8 (Regions 1&2,4), 12/9 (Regions 1&2,4), 12/11 (Regions 1&2), 12/12 (Regions 1&2), 12/13 (Regions 1&2), 12/16 (Regions 1&2), 12/18 (Region 5), 12/19 (Regions 1&2,5), and 12/20 (Regions 1&2). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.39	0.60	0.41	0.39	0.49		
Median Rate*	0.40	0.51	0.44	0.35	0.44		

^{*} Per 100,000 Residents

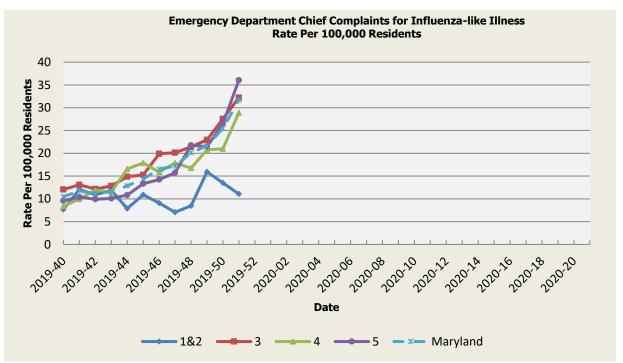
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surfeeds into ESSENCE is currently being validated. We will include once the validation process is complete.	
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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2019 through May 2020). Seasonal Influenza activity for Week 51 was: High Activity and Widespread Geographic Activity.

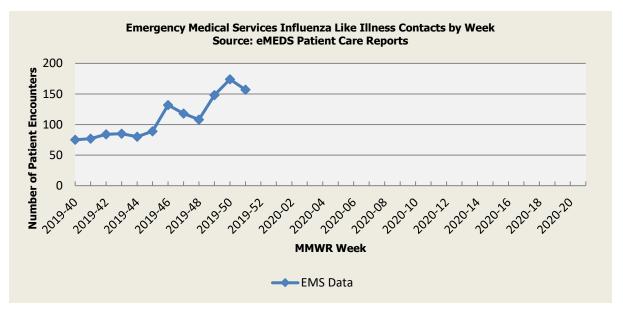
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.14	13.34	12.83	11.33	12.27	
Median Rate*	7.66	10.39	9.50	8.82	9.49	

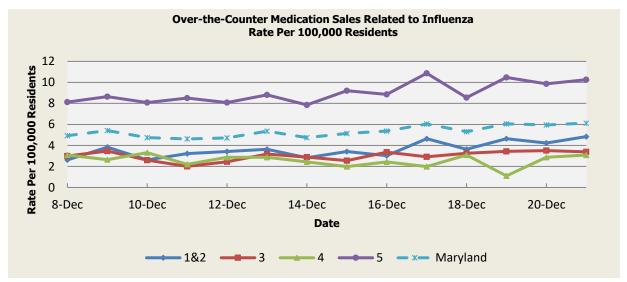
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

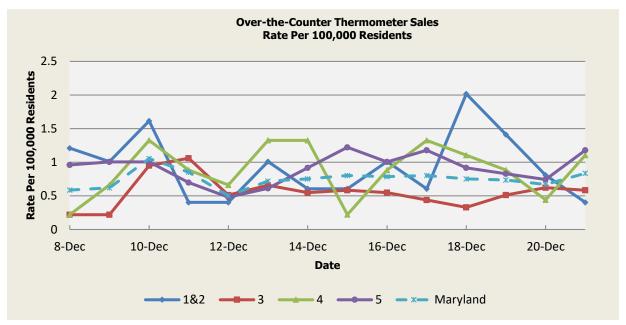


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.44	4.41	2.66	7.77	5.48
Median Rate*	2.82	3.51	2.21	6.99	4.72

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.89	2.75	2.20	3.65	3.07
Median Rate*	2.62	2.67	1.99	3.58	3.03

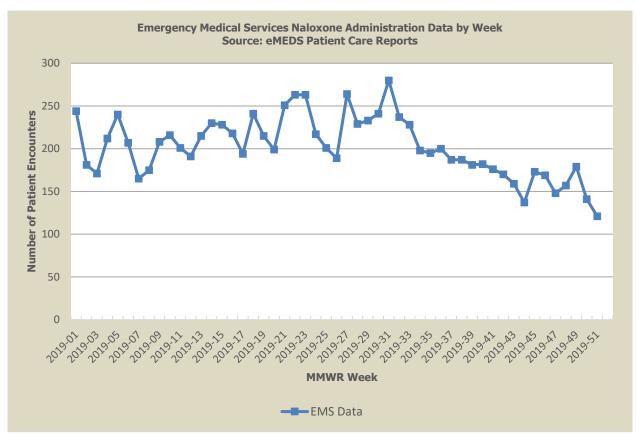
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

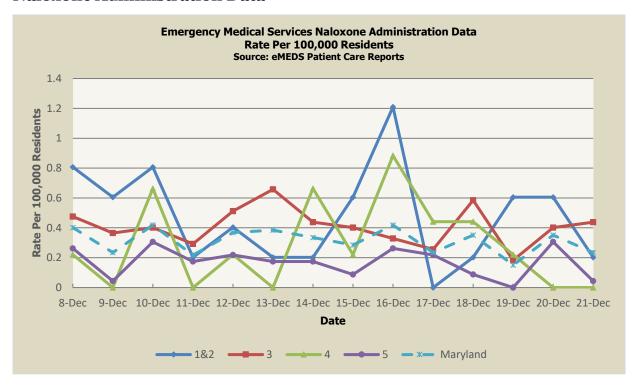
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 26th, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

SHEWANELLA HALIOTIS (NEW YORK), 21 Dec 2019, On 18 Dec 2018, a man aged 87 years was evaluated in a hospital emergency department in Flushing, New York, for right lower abdominal quadrant pain. Evaluation included a computed tomography scan, which showed acute appendicitis with multiple abscesses measuring 3 cm or smaller. Read More: https://promed-post/?id=6852493

LISTERIOSIS (NATIONAL), 21 Dec 2019, The CDC, public health and regulatory officials in several states, and the US Food and Drug Administration (FDA) are investigating a multistate outbreak of _Listeria monocytogenes_ infections linked to hard-boiled eggs. Read More: https://promedmail.org/promed-post/?id=6852412

VAPING-RELATED ILLNESS (NATIONAL), 21 Dec 2019, The CDC today [19 Dec 2019] announced the updated number of hospitalized e-cigarette, or vaping, product use-associated lung injury (EVALI) cases* and EVALI deaths. Hospitalized EVALI cases: As of 17 Dec 2019, 2506 cases of hospitalized EVALI were reported by all 50 states, the District of Columbia, and 2 US territories (Puerto Rico and the US Virgin Islands). Read More: https://promedmail.org/promed-post/?id=6851991

INTERNATIONAL DISEASE REPORTS

MERS-CoV (MULTI-COUNTRY), 26 Dec 2019, On [5 Dec 2019], the National IHR Focal Point for Qatar reported 3 laboratory-confirmed cases of Middle East respiratory syndrome (MERS-CoV) infection to WHO. Read More: https://promedmail.org/promed-post/?id=6858986

RABIES (**PAKISTAN**), 24 Dec 2019, A man from Tando Allahyar is battling for life at Jinnah Postgraduate Medical Centre (JPMC) after he was diagnosed with rabies encephalitis, a disease caused by bites of rabid dogs and other animals from which there is no chance of survival if the affected person was not vaccinated on time. Read More: https://promedmail.org/promed-post/?id=6856725

LEGIONELLOSIS (**AUSTRALIA**), 24 Dec 2019, Western Australians [WA] who have recently been to Bali [Indonesia] or are planning a trip to the island are being warned of a potential risk of legionnaires' disease at Ramayana Resort and Spa in central Kuta. It comes after the 4th notified case in WA since February [2019]. Read More: https://promedmail.org/promed-post/?id=6856171

LEISHMANIASIS (**INDIA**), 24 Dec 2019, At least 10 people of an Adivasi [indigenous people to the place] village in South Dinajpur district's Kushmandi block [West Bengal state] have been infected with kala-azar [visceral leishmaniasis], officials said. Kala-azar is a form of the disease leishmaniasis marked by emaciation, anaemia, fever, and enlargement of the liver and spleen. Read More: https://promedmail.org/promed-post/?id=6854423

FOODBORNE ILLNESS (PHILIPPINES), 22 Dec 2019, At least 9 people are confirmed dead Sunday [22 Dec 2019] from suspected poisoning after reportedly consuming lambanog, or palm wine. Eight of the victims were from Rizal, Laguna. Read More: https://promedmail.org/promed-post/?id=6853828

MEASLES UPDATE (**MULTI-COUNTRY**), 21 Dec 2019, Kiribati reports its 1st case of measles, an 11 month old infant. Read More: https://promedmail.org/promed-post/?id=6852109

LEGIONELLOSIS (**CANADA**), 21 Dec 2019, On behalf of the Simcoe Muskoka District Health Unit, I'd like to offer this response to the post: At this time, the Simcoe Muskoka District Health Unit's investigations, including genotyping of clinical and environmental isolates, do not indicate a link between the Barrie and Orillia clusters of Legionnaire's disease. Read More: https://promedmail.org/promed-post/?id=6852109

EBOLA UPDATE (DEMOCRATIC REPUBLIC OF CONGO), 20 Dec 2019, The epidemiological situation of the Ebola virus disease in the provinces of North Kivu and Ituri dated 17 Dec 2019: Since the start of the epidemic, the cumulative number of cases is 3351, of which 3233 are confirmed and 118 probable. In total, there were 2217 deaths (2099 confirmed and 118 probable) and 1091 people healed. Read More: https://promedmail.org/promed-post/?id=6851293

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

<u>NOTE</u>: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

